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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,813	04/17/2006	Philip Rodney Kwok	JPD-4398-523	4898
23117 7590 07/15/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
DOUGLAS, STEVEN O				
ART UNIT		PAPER NUMBER		
3771				
MAIL DATE		DELIVERY MODE		
07/15/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/572,813

**Applicant(s)**

KWOK, PHILIP RODNEY

**Examiner**

/Steven O. Douglas/

**Art Unit**

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 27-44 is/are pending in the application.
- 4a) Of the above claim(s) 27-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 27-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 06302010, 01052010
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9-13, 34, 35, 36, 37, 38, 39, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (US 6,435,184).

The Ho reference discloses a gas mask apparatus comprising a shell 1, a cushion 12 and an air flow generator or fan/impeller (27,34), wherein the impeller 34 of airflow generator is *substantially surrounded by a housing defined by cooperating portions of rear cup body 1 and front cup body 3*. However, the Ho reference fails to disclose the air flow generator as being capable of creating a pressure of about 2-40 cm H<sub>2</sub>O. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ho device to operate at a pressure of about 2-40 cm H<sub>2</sub>O since it has held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

In regard to claim 10, 37 and 43, see power cord (3,72) and power source or batteries 24.

In regard to claim 12 and 44, the power source or batteries 24 of the device is fastened to the face (i.e. body) of a user with the strap 17 (i.e. at least one fastener) of the device.

In regard to claims 38 and 39, see vent opening 15.

Claims 6 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (US 6,435,184) in view of Schlobohm (US 5,154,168).

In regard to claim 6, the Ho reference discloses a gas mask apparatus (supra) where the air inlet port and air outlet are off-set with respect to each other ( see elements 33 and 13 in Fig. 3), but fails to disclose the air inlet port and air outlet being coaxial with respect to each other. The Schlobohm reference discloses another gas mask apparatus with an inlet port and outlet being coaxial in arrangement (see Figure 3 and the unnumbered axis). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the inlet and outlets of the Ho device to be coaxial as, for example, shown by Schlobohm wherein so doing would merely amount to the substitution of one functional equivalent inlet/outlet for another that would work equally as well, especially since the coaxial arrangement appears not to solve any known problem in the art.

In regard to claim 40, the Ho reference discloses a gas mask apparatus (supra), but fails to disclose at least one supplemental inlet port. The Schlobohm reference discloses another gas mask apparatus with plural inlet ports (see plural inlet ports 34 and 34a in Fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ho device to have plural inlet ports (i.e. at least one supplemental port) as, for example, shown by Schlobohm wherein so doing would merely amount to the substitution of one functional equivalent inlet port arrangement for another that would work equally as well.

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (US 6,435,184) in view of Jay (US 6,050,262).

In regard to claim 41 and 42, the Ho reference discloses a gas mask apparatus (*supra*), but fails to disclose the air flow generator as including first and second parts that are arranged to be selectively detachable. The Jay reference discloses another gas mask apparatus including first and second parts (see threaded interface 15 and 22) to facilitate select detachment of the associated air flow generator. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ho device to include first and second parts of a threaded interface in view of the teachings of the Jay reference to facilitate the detachment of the air flow generator for implied servicing, cleaning or replacement.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (US 6,435,184) in view of Frater et al. (US 6,772,760).

The Ho reference discloses a gas mask apparatus (*supra*), but fails to disclose the cushion as being made of a silicone elastomer. The Frater et al. discloses another gas mask apparatus having a cushion 30 made of a conventionally known silicone elastomer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a known silicone elastomer material for the material in which the Ho cushion is comprised of, wherein so doing would amount to the mere substitution of one type of cushion material for another that would work equally as well in the Ho device.

Claims 32 and 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho (US 6,435,184) in view of Starr et al. (US 5,517,986).

The Ho reference discloses a gas mask apparatus (*supra*), but fails to disclose an extension as claimed. The Starr et al. reference discloses another mask having an extension 68 that receives an associated headgear strap (see Fig. 8) to facilitate a more secure attachment to the face of a user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Ho mask to include an extension as claimed in view of the teachings of the Starr et al. reference to facilitate a more secure attachment to the face of a user.

#### ***Response to Arguments***

Applicant's arguments filed 6/30/10 have been fully considered but they are not persuasive. In regard to Applicant's repeated argument that since the fan 34 is not substantially surrounded by a housing, the velocity of the air flow generated by the fan 34 is not capable of generating the pressure recited in the claims, examiner disagrees. Examiner takes the position that the fan 34 is substantially surrounded by a housing defined by the rear cup body 1 and the front cup body 3 and that it would be the confines defined by these portions of the front and rear cup bodies that would allow the Ho device be modified to generate the claimed pressures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Steven O. Douglas/ whose telephone number is (571) 272-4885. The examiner can normally be reached on Mon-Thurs 6:30-5:00.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven O. Douglas/  
Primary Examiner  
Art Unit 3771

SD  
7/14/10